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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,619	01/23/2001	Ursula Murschall	00/052 MFE	3096

7590 04/25/2002

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EXAMINER	
NGUYEN, KIMBERLY T	
ART UNIT	PAPER NUMBER
1774	6

DATE MAILED: 04/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

T.D. 6

Office Action Summary	Application No.	Applicant(s)	
	09/769,619	MURSCHALL ET AL.	
	Examiner	Art Unit	
	Kimberly T. Nguyen	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-13 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-11, drawn to a white film, classified in class 428, subclass 212.

II. Claims 12-13, drawn to a process for producing a white film, classified in class 264, subclass 171.11.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as mixing the thermoplastic material and optical brightener and then providing pressure to the mixture to produce a film.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Klaus Schweitzer on April 9, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-13 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what Applicants claim since claim 1 shows the phrase "whose principle constituent is a crystallizable thermoplastic" *preceding* the transition phrase of "the film comprises..." Thus, the scope of the claim is unclear.

In claim 1, it is not clear why the step of "where the optical brightener...are fed as a masterbatch during film production" is included in the product claim since no method is claimed.

The term "principal" in the phrase "whose principal constituent is a...thermoplastic" in claim 1 is a relative term which renders the claim indefinite. The term "principal" is not defined by the claim, the specification does not provide a standard

for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

In claim 10, it is not clear why the step of "more than one layer has been built up" is included in the product claim since no method is claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., U.S. Pat. No. 5,660,931.

Kim shows a white film (core layer) comprising polyethylene terephthalate (crystallizable thermoplastic), rutile-type titanium dioxide (white pigment) (column 2, lines 3-9), and bisbenzoazole (optical brightener) (column 5, lines 13-22). Kim shows that the white film has a thickness of 12 micrometers (column 9, lines 11-16). Kim shows that the rutile-type titanium dioxide has an average particle diameter ranging from 0.1 to 3 micrometers (column 2, lines 54-55). Kim shows that the degree of whiteness of the film is greater than 85% (Table 2).

Though Kim shows that the bisbenzoazole whitening agent is added in an amount so that the reflectivity at 440 nm becomes greater than 75% (column 5, lines 21-22), Kim does not show that the bisbenzoazole is 10-50,000 ppm of the weight of the crystallizable thermoplastic as in instant claim 4. Kim does not show the percentage by weight as in instant claim 3. Though Kim shows that the titanium dioxide particles have 0.01 to

0.15% by weight based on the titanium dioxide of a zinc coating (column 4, lines 52-55), Kim does not show the Yellowness Index as in instant claim 9. However, such concentrations, percentages by weight, and Yellowness Indices are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the concentrations, percentages by weight, and Yellowness Indices, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. concentrations, percentages by weight, and Yellowness Indices) fails to render claims patentable in the absence of unexpected results.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., U.S. Pat. No. 5,660,931 in further in view of von Meer, U.S. Pat. No. 4,384,040.

Kim is relied upon as above for claim 1.

Kim does not show the blue dye and amount of blue dye as in instant claim 6. However, the amount of blue dye is a property which can be easily determined by one of ordinary skill in the art in order to enhance the whiteness of the film. With regard to the limitation of the amount of blue dye, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. amount of blue dye) fails to render claims patentable in the absence of unexpected results.

Von Meer shows a photographic paper wherein the white titanium dioxide pigmented paper is dyed with cobalt blue or ultramarine (column 3, line 68 to column 4,

line 25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add cobalt blue or ultramarine in addition to the whitening titanium dioxide because it is known that cobalt blue and ultramarine is used to enhance the whiteness and to compensate for the yellowish tint of the invention.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., U.S. Pat. No. 5,660,931 in further in view of Murschall et al., U.S. Pat. No. 5,900,294.

Kim is relied upon as above for claim 1 and 7. Though Kim shows that the titanium dioxide particles are coated with a zinc coating (column 2, lines 3-9) to improve light resistance, Kim does not show that the zinc coating is a zinc oxide coating and the amount of coating as in instant claim 8.

The amount of coating is a property which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the amount of coating, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. the amount of coating) fails to render claims patentable in the absence of unexpected results.

Murschall shows a multilayer film comprising white pigments of rutile titanium dioxide with a coating of zinc oxide (column 3, lines 47-65). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a zinc oxide coating on titanium dioxide because it is known that a zinc oxide coating improves lightfastness.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly T. Nguyen whose telephone number is (703) 308-8176. The examiner can normally be reached on Monday to Friday, except on every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Kimberly T. Nguyen
Examiner
April 18, 2002